COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

May 1, 2024 Facilitator's Summary Facilitation Team: Emily Stranz & Colby Mills, DS Consulting

The following Facilitator's Summary is intended to capture basic discussion, decisions, and actions, as well as point out future actions or issues that may need further discussion at upcoming meetings; it is not intended to be the "record" of the meeting. Official minutes can be found on the TMT website: https://pweb.crohms.org/tmt/agendas/2024/ Suggested edits for the summary are welcome and can be sent to Colby at colby@dsconsult.co.

Review Meeting Summaries & Minutes – TMT Members approved the official meeting minutes and facilitator's summaries from April 17 and 24.

Water Supply Forecasts – Doug Baus, Corps, reported that official water supply forecasts for May will be released on Friday, May 3, and will be presented at next week's TMT meeting. He noted that the May water supply forecast sets the Libby Dam minimum and sturgeon pulse. The Corps plans on coordinating a sturgeon pulse SOR at the May 8 TMT meeting.

Eric Rothwell, Reclamation, acknowledged below average water supply in Montana, and specifically concerns regarding dry conditions in the Flathead Basin and Flathead Lake elevations. Last month's forecast was in the 70% of average range, and Reclamation anticipates similar conditions for May. Eric noted that the May water supply forecast will help decide summer flow augmentation, adding that the 2020 CRSO EIS and consultation expanded from the previous 10-foot draft limit at Hungry Horse, to a 20-foot draft to supply additional flow augmentation in dry years, and to balance resident fish and downstream flow needs. This year will likely see the 20-foot draft. Eric emphasized that in years like this with dry conditions, Hungry Horse will often draft below 3,540 feet (full is 3,560 feet) to maintain minimum flows, which is a possibility this year. Reclamation will know more after the official forecasts come out later this week.

Eric reiterated the acknowledgement of the dry year concerns throughout the basin, noting that TMT received a letter from Senator Jon Tester in Montana. Reclamation will continue to coordinate with Montana, with Energy Keepers, Inc. (EKI), who operate Seliš Ksanka Qlispe Dam (SKQ), and other regional partners, including TMT. Eric also noted that the Corps granted EKI a deviation, allowing them to fill more than they normally would this spring for flood risk management; the project can be at 2,892 feet, one foot from full, by Memorial Day.

NOAA appreciated the update and looked forward to continuing conversation on this issue into the season. Brian Marotz, MT, will be reaching out to Senator Tester's office early next week.

Lower Snake River MOP Operations – Aaron Marshall, Corps, reported that fish transport operations began on April 24. When the fish transport barge at Lower Monumental Dam crosses the tailrace from the navigation lock to the fish transport loading dock, it requires a brief reduction in spill to safely traverse the tailrace. The reduction in outflow and subsequent increase at Lower Monumental after the transport barge departs the tailrace causes a dip and then an increase in the Ice Harbor forebay. On Thursday last week the Corps expanded the Ice Harbor forebay operating range from the normal 1.5-foot range to a 2-foot range to try and accommodate the reduction in spill for the fish transport barge and stay within MOP.

Despite the change, the Corps was unable to keep both Lower Monumental and Ice Harbor within MOP ranges, so on Monday the range at both projects was expanded to a 3-foot range (hard constraint) to help support the reductions in spill for the transport barge.

In response to a query whether this issue has occurred in the past and is expected to continue, Aaron noted that this has been required in the past, although was unsure if it has been on a similar frequency; the Corps intends to look closer at yearly comparisons to identify if there is a specific flow range that might trigger the issue. Tony Norris, BPA, noted that it could be a function of there being only 1 turbine in use at minimum generation. A potential alternative to increasing MOP could be to increase generation at Lower Monumental during barge transport.

Kelsey Swieca, NOAA, noted that this issue might require a deeper technical look and consideration of possible alternatives to prevent extended MOP as much as possible. Salmon Managers are generally interested in engaging in these technical discussions over the next few weeks. Erick Van Dyke, OR, added that these changes to MOP negatively impact fish passage operations, emphasizing that the TMT should look hard at finding ways to minimize this where possible.

Aaron confirmed that this operation is only to support safe navigation for the transport barge. The Lower Monumental forebay elevation yesterday peaked at 538.56 feet, just 6/100ths of a foot above the normal MOP maximum, and the full 3-feet expanded MOP range was not utilized.

Kelsey concluded that FPAC will discuss the issue further, pulling in Salmon Managers that were not present today, and will circle back with input on an approach for technical conversations.

Questions or Comments from non-TMT Members: There were no questions or comments from non-TMT Members.

The next scheduled TMT meeting is on May 8, 2024, at 9:00 AM.

Columbia River Regional Forum Technical Management Team DRAFT OFFICIAL MINUTES

Wednesday, May 1, 2024

Minutes: Andrea Ausmus, BPA (contractor, CorSource Technology Group)

Today's TMT meeting was held via conference call and webinar, chaired by Doug Baus, Corps, and facilitated by Emily Stranz, DS Consulting. A list of today's attendees is available at the end of these minutes.

- 1. Review Summaries and Minutes April 17 and April 24 Summaries and Minutes
 - April 17 approved.
 - April 24 approved.
- 2. May Water Supply Forecasts Doug Baus, Corps-NWD; Eric Rothwell, Reclamation

Corps

- Baus noted that the official supply forecasts would not come out until Friday
 (May 3). He wanted to remind TMT that the May official forecast defines some
 important actions. Baus said that the Corps has posted 'Table 4' from the Water
 Management Plan (WMP) which shows BiOp Actions with certain Water Supply
 Forecasts (WSF).
- Libby (LIB)
 - o May WSF set the LIB minimum sturgeon volume.
- The May WSF comes out Friday and the Corps plans on coordinating the Sturgeon Pulse SOR next Wednesday.
 - o Plan on polling on that at the next TMT meeting.

Reclamation

- Rothwell said that they know that there is a lot of concern in Montana and on the Flathead with the dry conditions.
 - Last month's forecast was dry and precipitation in the last month has been below average, in the seventy percents of average.
 - Rothwell said that they are expecting a similar water supply forecast as April to come out next week.
- Rothwell said that the decision point for the summer flow augmentation operations is the May water supply forecast.
 - In the 2020 EIS they changed the summer flow augmentation operation from two elevation targets. Previously in most years, the draft would be 10- or 20-feet from full, in the driest years it would be 20-foot draft. The current operation incrementally increases the amount of flow augmentation from 10-to 20-feet, with deeper drafts occurring based on water supply conditions. This results in providing more flow augmentation in drier years while also trying to balance resident fish and downstream flow needs.

- Rothwell said that this year if it is not 20 feet, it will be close. They will likely land on the 20-foot draft but in the years with really dry conditions to meet minimum flows they often draft below 3540 feet. That is a real possibility.
- Rothwell said that they do want to acknowledge the concern in the basin. TMT received the letter from Senator Tester. Rothwell also recognized the staff that was on the TMT meeting call. He said that they will continue to coordinate with the State, with Energy Keepers who operate Seli's Ksanka Qlispe' (SKQ) and others (including TMT).
 - Rothwell noted that Energy Keepers were granted a deviation request by the Corps that allows them to fill more than they would have this Spring for Flood Risk Management. They can be at 2892' or 1 foot from full.

Kelsey Swieca, NOAA, responded as FPAC chair. She said that she appreciated Rothwell's update, and they look forward to continuing these conversations into this year.

3. Lower Snake River MOP Operations – Aaron Marshall, Corps-NWD

- Fish transport operations began last Wednesday, April 24, 2024.
- They had the Fish Transport Barge at Lower Monumental (LMN) and when the transport barge has to move from the LMN navigation lock over to the Fish Transport loading dock it has to go across the LMN tail race.
- When that occurs, because of high spill and tail race hydraulics, the barge operator requests a brief reduction in spill from LMN to be able to safely navigate across the tail race and get to the loading dock.
- When this started last week the reductions in spill at LMN caused a dip in Ice Harbor (IHR) forebay. Once LMN starts spilling again it causes IHR forebay to increase with the increased outflow.
- Operators were reporting difficulties of staying within the normal MOP range at IHR.
- Last Thursday (April 25) RCC expanded the IHR forebay range from the normal 1.5-foot MOP to a 2-foot MOP range.
 - RCC wanted to take an incremental approach to that and see if that 2-foot MOP range would work to accommodate those reductions in spill for the Fish Transport Barge.
 - Over the past weekend it became apparent that they were not able to keep both LMN and IHR within those MOP ranges so on Monday (April 30) RCC expanded the MOP range at both IHR and LMN to a 3-foot range.
 - This is just as the hard constraint. Operators still have the soft constraint in the normal, lowest 1-foot range. They needed to be able to use the 3 feet at both LMN and IHR to help support the reductions in spill for the Fish Transport barge in the LMN tail race.

Tom Lorz, Umatilla (CRITFC), said that we have not had this problem in past years. He asked if this is a certain flow band that Marshall is noticing these issues of trying to get across the spillway at, as in does Marshall expect this to continue the whole season or does he expect as flows come up that we would still have this issue.

Marshall said that he cannot speak too much to previous years operations. He said that he knows that they have used this flexibility in the past to accommodate the Fish Transport Barge operations. He said that he is not sure if it was on a similar frequency. He said what he can say for this year is that we have had flows in the Lower Snake around 80 kcfs and as soon as we reduce the spill down to zero to allow that Fish Transport barge to traverse the tail race, they have water immediately backing up in the forebay. He said another aspect of that they kept both LMN and IHR at minimum generation so they have not increased generation that would be one potential alternative to using the forebay as much as they have. They would be able to potentially increase outflow using some additional turbines. Marshall said to try to answer Lorz' question a little better, it is something that he would like to take a look at, compare this year to previous years and see if we can identify a flow range where this becomes an issue.

Tony Norris, BPA, said that he thinks that it is a function of that there is only one unit on when we are on "Min-Gen Spill the Rest" with such high spill flows percentages. He said that he thinks that in the past when there were more turbines on the flow across the project was more balanced.

Swieca said that Marshall began to allude to this, but she thinks that it is pretty clear that this issue might require a deeper technical look and a little bit more investigation to think about possible alternatives (or brainstorm additional ideas). She said that she thinks that the Salmon Managers are generally interested in being engaged in some of those more technical discussions and they look forward to doing that in the next couple of weeks, or in this season at a minimum. She said that she wanted to put out there that there is interest in exploring what other options may be available to prevent the expanded MOP to the degree possible if there are other options that are even going to achieve the requirements. She said that there are hoping to have some of those technical discussions with the Action Agencies in the next couple of weeks.

Erick Van Dyke, OR, said that he wanted to make it known that these changes impact the Fish Passage Operations in ways that are considered negative. He said that we should really dive deep and try to figure out ways to minimize this where we can.

Baus said that he wanted to clarify that this is a problem we have had in the past, as others had commented that this was a problem that we had not had in the past. He said the problem being when we have the LMN barge traverse, and we modify spill operations we have had challenges maintaining IHR forebay within the MOP Operation, as well as the LMN forebay. He said that he wanted to make sure that was clear.

Stranz said that there was a desire for more information in a look back to see when that has occurred and if there is a flow band

Charles Morrill, WA, said that he appreciated Baus' comment. He asked if this is based only on barge transit and not on a daily operation. They have always adjusted for the operation at LMN to allow the barge to cross, so the extended MOP range is not intended only for transit during that time period. That is what he would like clarification on.

Marshall said that the expanded forebay range is only intended to support those reductions in spill and for the Fish Transport barge navigation. He added that sometimes with the LMN tail race traverses, they typically occur late in the evening so that can sometimes have compounding effects that last outside that window after the Fish Transport barge leaves LMN. If they have LMN forebay filling it may take a little bit of time to bring it back down to the normal MOP range and likewise at IHR, those effects

will be realized a little later for the projects that are downstream. The expanded MOP ranges are only to support safe navigation for the Fish Transport barge.

Morrill said that made sense because the barge is down there about 1700 to 1800 hours depending on what is going on. He said that he understands that the impact would extend into the evening hours at LMN and later at ICH.

Marshall wanted to point out that the highest elevation forebay elevation at LMN (noted in the column for April 30) was 538.56 ft, just 6-hundredths of a foot above the top of the normal MOP hard constraint range. They did not utilize the full 3 feet, but a little outside the normal MOP range.

Morrill said thank you for that.

Stranz said that Swieca suggested additional conversation, Stranz asked if Swieca wanted to add a finer detail to that or if that would be something that the Fish Managers would take care of offline within the next couple weeks.

Swieca said that they should probably take care of that offline, or at least come up with a plan for it offline, there are a number of people who are traveling this week and she wanted to make sure that she could touch base with all of them prior to offering a suggesting of the best method for tackling this issue.

Brian Marotz, MT, said that he is the representative for Montana on TMT, and he happens to be in Washington at the moment. He will be back in Montana early next week and at that point he will be reaching out to John Tester's office.

4. Public Comments:

- 5. Set agenda for next meeting May 8, 2024
 - a. SOR for Libby Dam sturgeon pulse
 - b. Summer Operations @ HGH
 - c. LMN and IHR MOP Update (?)
 - d. Dworshak Update
 - e. Libby SOR

Today's Attendees:

Agency	TMT Representative(s)
NOAA Fisheries	Kelsey Swieca
Oregon	Erick Van Dyke
Washington	Charles Morrill
Kootenai Tribe	
Colville Tribe	Dennis Moore
Umatilla Tribe	Tom Lorz (CRITFC)
Yakama Nation	Keely Murdoch
Bonneville Power Administration	Tony Norris, Scott Bettin, Ben Hausmann
US Fish & Wildlife Service	Dave Swank
Idaho	
Montana	Brian Marotz
Spokane Tribe	
Nez Perce Tribe	Jay Hesse
Warm Springs Tribe	
Bureau of Reclamation	
Army Corps of Engineers	Doug Baus (host), Julie Ammann, Lisa Wright, Aaron Marshall

Other Attendees (non-TMT members):

COE - Dan Turner, Alexis Mills, Chris Peery, Tiffany Dixon, Tom Conning

BOR – Eric Rothwell

Washington Ecology – Thomas Starkey

Montana Senator Jon Tester's Office – Anneliese Slamowitz

DS Consulting – Emily Stranz (Facilitator), Colby Mills

CorSource – Andrea Ausmus (BPA note taker, Contractor) recording only

Northwest Power and Conservation Council – Kate Self

 $Energy\ Keepers-Eve\ James$

Clearing Up – K.C. Mehaffey